

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Review of the Commission's Part 95 Personal Radio Services)	WT Docket No. 10-119
)	
Auction of 218-219 MHz Radio Service and Phase II 220 MHz Service Licenses)	AU Docket No. 10-107
)	

To: Office of the Secretary
Attn: the Commission

Reply to Comments

Warren Havens ("Havens"), Environmental LLC ("ENL"), Verde Systems LLC ("VSL"), Intelligent Transportation & Monitoring Wireless LLC ("ITL"), Telesaurus Holdings GB LLC ("THL"), V2G LLC ("V2G") and Skybridge Spectrum Foundation ("Skybridge") (together "Commenters")¹ hereby file these reply comments to some comments and requests in this proceeding including the request (the "Request") of Metropolitan Transportation Authority ("MTA") and the supporting statement/comments of the Association of American Railroads ("AAR") and the Joint Council on Transit Wireless Communications (the "Joint Council") in the above-captioned docket regarding the 218-219 MHz radio service ("218-219 MHz" or "TVDS").

As shown below, the Request should be disregarded including since it is clearly outside the scope of this proceeding (it effectively is a request for rulemaking at odds with the FCC proposal and call for comments in this proceeding), and since it is based on bald assertions that, upon simple examination of relevant public records, and based on direct knowledge of Petitioners, are not correct.

Partial Summary of FCC Notice

¹ ENL, VSL, ITL and SSF all hold AMTS licenses as evidenced by FCC records. Also, Havens, VSL and SSF hold 220-222 MHz licenses.

In the subject NPRM, FCC notices intent to streamline certain Part 95 rules and move IVDS to Part 27 to allow more “flexibility” and provide by rule common-carrier service as well as private personal service. It also proposes to modify certain rules with regard to TV engineering studies, site placement approval, and certain restrictions on site-based incumbents in reapplying for IVDS during 3 years if they failed to construct. FCC asked for any other suggestions or specific recommendations or technical changes to make IVDS regulatory environment more flexible to promote its use.

Partial Summary of Comments Subject of this Reply

MTA Request:

1. Congress’ mandate of PTC should be recognized by the FCC as a mandate to make spectrum available for PTC. Although Congress mandated PTC, Federal Railroad Administration and FCC have not addressed spectrum availability. Thus, MTA making request for 500 kHz of IVDS. Request that FCC allocate 500 kHz of IVDS nationwide to meet PTC needs. MTA believes this will be sufficient to meet needs in most cases. In certain areas that require more spectrum, a railroad could buy or lease some additional 220-222 MHz, AMTS or the remaining IVDS block.

2. IVDS is the only viable spectrum option. Congress’s mandate of PTC by 2015 requires that PTC systems be interoperable. Given current PTC radios for freight railroads, only 2 spectrum options exist: IVDS or AMTS. Freight railroads are using 220-222 MHz, but there is not enough left of it that is not already licensed and what the freight railroads have is insufficient to meet needs of freight and commuter railroads. AMTS is all licensed and subject to endless litigation between geographic and site-based. Also, although some railroads have reached agreements to purchase AMTS these are only isolated cases. The litigation creates uncertainty about being able to obtain and use AMTS in order to meet 2015 PTC deadline. Thus, AMTS is a non-starter.

3. Prefer the “B” block, but if “A” block is found by FCC to be less encumbered, then ok with “A” block.

4. Classify IVDS not in Part 27, but in Part 90. Part 90 is better for railroad use.

5. As part of allocation of part of IVDS for PTC, FCC should conduct an audit of existing licensees to see who is operational. Since there was no equipment in IVDS, MTA believes many incumbents are non-operational (MTA knows of one that is not operating). Any legitimate licensees should be relocated to the “A” block, similar to what FCC did in 800 MHz.

6. MTA implementation of PTC is estimated to cost \$670 million (including costs of the State of Connecticut to implement PTC).

7. PTC will require an extensive communications structure and multiple channels—

at minimum 5 channels are needed, each with 14 TDMA time slots. If PTC cannot communicate for 2 minutes due to insufficient channel capacity then an accident could occur.

8. MTA agrees with FCC proposal to get rid of IVDS requirement to do a plan to mitigate interference with Channel 13.

9. AAR and the Joint Council support the MTA comments and Request and, among the two, assert that IVDS will allow commuter railroads to be interoperable with freight railroads and also provide sufficient capacity for PTC. However, neither AAR nor the Joint Council originated the Request or submits a like one, or verifiable evidence in support of the Request, or why it should be considered given that it is outside the FCC NPRM purpose and specific provisions.

Reply Comments

(1) First, the Request should be rejected since the FCC has not asked for proposals to reallocate the subject 218 MHz spectrum to Part 90 or to a particular entity or market-segment (government railroad, commuter railroads, or all railroads). Any such fundamental changes in a radio service can only be considered under FCC rules, the Communications Act and the Administrative Procedures Act upon proper notice by the FCC of its consideration of such changes, and a proper pleading cycle on such considered changes. See, e.g., the August 24, 2010 decision by the US Circuit Court of Appeals for the Third Circuit in [*Council Tree Communications v. FCC*, No. 08-2036](#), marked “precedential” by the court, copy available at: <http://www.ca3.uscourts.gov/opinarch/062943p.pdf> .

US railroads, or some of them, are subject to the same statutes and rules as other parties and should refrain from request such as in the Request that are far outside established procedures for fair and efficient Federal agency, including FCC, rule changes.

(2) The asserted need for 218 MHz is unsupported and false. Petitioners support serious, well documented efforts toward more “intelligent” (safe, efficient, etc.) US transportation. See, e.g., the Skybridge Scribd web pages “C-HALO & STEER” collection at: http://www.scribd.com/document_collections/2340784. This includes commitments via Skybridge (a nonprofit that, by law, must use all its assets including FCC licenses in AMTS, 220

MHz, and M-LMS in support of government goals and other public-interest purposes) and the other Petitioners to provide core C-HALO (Cooperative High Accuracy Location) and STEER (Smart Transport, Energy, and Environment Radio) wireless capacity and services to all entities, especially US transportation sector, at no cost. It is clear that the only way any major US infrastructure such as transportation and energy systems, can become “intelligent” including safe and efficient (of which PTC alleges to be one component) is by serious, open, well documented and tested cooperation between the government, private enterprise, and private nonprofit sectors. Despite direct communications, for at least five years, with AAR, all the major US freight railroads, AMTRAK, and MTA itself, not one has shown any substantial interest to date in C-HALO, STEER or even AMTS or 220 MHz spectrum (for their own purposes, apart from C-HALO and STEER as Petitioners are pursuing). That is not an objecting comment as to those entities legal obligations, but an observation that they are not actually interested in the above noted form of cooperation for smart transportation, including PTC (and the broader matters needed for PTC: modern wide-area data wireless which can support PTC and other forms of data) nor are they actually seeking more 220 MHz, AMTS or adjacent spectrum including 218 MHz—except when and where they sense special opportunities and advantages separate from FCC methods of attending competitive auctions and secondary market negotiations and transactions. That is the case with the subject Request.

(3) The Request and the subject Comments did not provide any technical showing or even summary evidence of what PTC is, why it needs certain amount of spectrum under certain technical rules, and why of all spectrum available (by well established means- Part 90 site based licensing for government entities, auctions, unlicensed use, licensing by rule, secondary market purchases and leases, proposed new allocations by proper requests for rulemaking, etc.), MTA and its alleged other railroads it may interoperate with, need 218 MHz. It is clear in FCC precedent and commons sense that any such bold assertions must be well supported by technical

and other showings. The Request fails and is not responsible in this matter.

(4) As for PTC, what is is and is not, what Congress requires and does not (including, Congress does not require any 200- MHz range spectrum for PTC), see Petitioners pleading in the SCRAA docket described herein. These apply to this subject Request also. MTA has demonstrated even less due diligence, definitions and showings to the FCC than SCRAA, and SCRAA provided scant diligence, definitions and showings. In both the case of SCRAA and MTA, Petitions privately and publicly offered to engage in discussions on use of AMTS and 220 MHz and M-LMS for their needs, to the degree they were legitimate and in the public interest. Not all government agency actions are, as history documents.

(5) It is clear that the direction, and even current technology, in wireless is towards smart radios and systems, including SDR and other means to support multiple bands, multiple protocols, and interoperability among many systems using various bands and protocols. US railroad are a huge sector and entirely able to use such smart radios and systems. These can use various bands, and indeed, various bands and network architectures and technical characteristics (power, antenna heights, protocols, etc.) always provide the best solution for very wide area, complex wireless to serve many critical needs. No railroad is planning PTC as independent system-wide new form of wireless, but is will be an application on new multi-application wide area wireless: See Petitioners SCRAA docket pleadings. Thus, it is not correct to assert that for PTC, MTA and other US rail needs and can only use 217-222 MHz spectrum. What they need is a serious, smart approach to wireless and only that is in the public interest, including as meant in the Communications Act for spectrum allocations and licensing.

(6) US rail has had for decades a large amount of VHF and 900 MHz, all or most all for no cost, including for the private for-profit rails companies. The FCC and NTIA survey of use by rail and utilities of their spectrum use and needs conducted in the last decade did not find that these large market segment efficiently used the spectrum they already had, nor that they

should be allocated additional spectrum. Again, what is needed especially by the public government component of US rail and other transportation, is public open intelligent approach to new wireless, in cooperation with private nonprofit and for-profit entities that seek to support that, and not just throwing more spectrum at the alleged, but poorly defined and documented problem.

(7) MTA comments that certain commuter railroads have an agreement regarding AMTS, but those are isolated. That says nothing but that, to MTA's knowledge, the railroads have not sought other AMTS or not succeeded in business negotiations for undisclosed reasons. It is well known publicly. In fact, Petitioners were approached by representatives of MTA asking for information on potential use of TETRA for new wireless, and that lead to discussion of Petitioners AMTS and M-LMS for possible use by railroads. However, MTA simply showed no interest of any kind. Thus, it is flatly false to assert to the FCC that AMTS spectrum is not available—to the degree that may be suitable for railroads use. However, MTA is at odds with SCRAA, another government commuter rail operator, in terms of basic technical needs, including power and height, for the alleged required PTC common to them. Each can assert whatever it wants, since neither has submitted any technical showing of what is required for PTC in the lower 200 MHz spectrum. When a party makes technical assertions with no technical showing at all, they should be summarily rejected.

Reference and Incorporation

In support of the above, Commenters hereby reference and incorporate all the facts and arguments in their filings in the following proceedings rather than reiterate them here again (only the lead filing is listed for each below for convenience, but Commenters hereby reference and incorporate all filings they have made in the below-listed proceedings). It is more efficient for Commenters to reference and incorporate their filings in the below proceedings since they are already in filings before the FCC and already provide facts and arguments that support not granting the Request, including but not limited to that 217-222 MHz spectrum is not required for

PTC and not the only spectrum option available, that further, as shown in information publicly available on PTC (see, e.g., reports presented to the Federal Railroad Administration included in the SCRRRA Petition and the SCRRRA Petition Supplements below), it is not clear that PTC as currently planned is cost justified, or that the public should foot the bill as SCRRRA and other public agencies argue to Federal Railroad Administration (see e.g. the facts and arguments regarding PTC, spectrum options, etc. on pages 7-14 of the reply filed by ITL et al. in the SCRRRA Petition proceeding listed below).

- (1) *Petition to Deny, or in the Alternative Section 1.41 Request*, filed by Environmental et al. on April 28, 2010 in WT Docket No. 10-83 regarding an assignment of authorization application and related waivers filed by MCLM and Southern California Regional Rail Authority, File Nos. 0004153701 and 0004144435 (the “SCRRRA Petition”).
- (2) All supplements and supporting showings filed by any of Petitioners in WT Docket No. 10-83 in support of the SCRRRA Petition (see filings received on 5/31/10, 6/8/10 and 7/13/10 by any or all of Petitioners) (the “SCRRRA Petition Supplements”)
- (3) *Reply Comments* filed by Environmental LLC et al. in WT Docket No. 10-83 on May 10, 2010. (the “SCRRRA Proceeding”)

Contrary to MTA’s assertions that PTC is critical and in the public interest, the public record shows that many parties question whether taxpayer funds will be well spent on PTC as it is now conceived. See, e.g., Exhibit 2 to the Reply Comments filed by Commenters in the SCRRRA Proceeding.^{2/3} This exhibit, from the Association of American Railroads (and sources it drew upon) contains, among other relevant parts (underlining added):

Even at its most basic level, the PTC mandate will cost freight railroads (and ultimately their customers) more than **\$5 billion** in initial start-up costs and **hundreds of millions more in annual maintenance costs**, according to FRA estimates of the most likely railroad cost scenarios. The FRA admits that railroads’ actual PTC-related costs could end up

² Copy in HTML also available online at:
http://docs.google.com/viewer?a=v&q=cache:SgbfKWeBy7wJ:www.aar.org/~media/AAR/PositionPapers/PTC%2520Oct%25202009.ashx+positive+train+control+mandate&hl=en&gl=us&pid=bl&srcid=ADGEESgfwQ7S3HmxNoWZPZOr8ovsZFxxiGykWk7Y0gULxz02XUjSflQULkFSUxbNytYNQtNAUrRotDstRuZjdBPY97W8w6haTBy3CBXOo7Q1YLw9IY5_pWs8ruqt9mvBnv4BWqVHtEJ2&sig=AHIEtbQGMqQqMPr7wA1SvVgzE2JGJK7CcQ

³ This Exhibit 2 to these Reply Comments, however, shows why PTC is at best “not ready for prime time” for those railroads, as partly indicated in the quotes above.

being much higher, and that the safety benefits of PTC will be only a small fraction of those costs. The FRA's proposed regulations regarding PTC implementation include several provisions over and above the statutory mandate that would add hundreds of millions of dollars to railroads' costs but **would not improve safety in any meaningful way.** **The greater the unnecessary costs imposed on railroads, the less** they will be able to provide the safe, cost-effective, and environmentally-friendly freight transportation service that America needs now and in the future.

* * * *

Railroads have spent hundreds of millions of dollars developing PTC, but it's still an **emerging technology.** To ensure the technology is fully functional and completely safe, **much more development and testing are needed.**

* * * *

The \$5 billion that Class I freight railroads will have to spend just to install PTC by 2015 is roughly equal to a **full year's worth** of their infrastructure-related **rail capital spending.** 2 Because railroads have limited funds to devote to infrastructure projects, **expenditures on PTC will necessarily mean reduced expenditures on other projects** that would increase rail capacity, improve service, provide environmental benefits, and enhance safety.

- PTC will be tremendously expensive, but will provide benefits significantly lower than its costs. The FRA estimates that, under the most likely scenario, the aggregate value of PTC-related rail safety benefits over 20 years will be \$600 million to \$900 million. **In other words, railroads will incur at least \$15 in PTC costs for each \$1 of PTC benefits.**

Nor will PTC make rail operations faster or more reliable. Based on experience to date and the need for railroads to rush PTC implementation in the face of the 2015 deadline, it is more likely that PTC will make rail operations **less efficient and reliable,** not more so.

* * * *

However, the **PTC mandate threatens railroads' unparalleled potential to lower shipping costs, make our economy more efficient, take trucks off the highway, save fuel, and reduce harmful emissions.** The reality is, **money railroads spend on PTC can't be spent on other safety measures or capacity, environmental, or service improvements.**

Respectfully,

Environmental LLC (formerly known as AMTS Consortium LLC), by

[Filed electronically. Signature on file.]

Warren Havens

President

Verde Systems LLC (formerly known as Telesaurus VPC LLC), by

[Filed electronically. Signature on file.]

Warren Havens

President

Intelligent Transportation & Monitoring Wireless LLC, by

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Warren Havens

President

Telesaurus Holdings GB LLC, by

[Filed electronically. Signature on file.]

Warren Havens

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V2G LLC, by

[Filed electronically. Signature on file.]

Warren Havens

President

Skybridge Spectrum Foundation, by

[Filed electronically. Signature on file.]

Warren Havens

President

Warren Havens, an Individual

[Filed electronically. Signature on file.]

Warren Havens

Each of Petitioners:

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Date: September 20, 2010

Certificate of Service

I, Warren C. Havens, certify that I have, on this 20th day of September 2010, caused to be served, by placing into the USPS mail system with first-class postage affixed, unless otherwise noted, a copy of the foregoing Reply Comments, unless otherwise noted, to the following:⁴

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Chair, Coordination Committee
Vice Chair, Joint Council

[Filed Electronically. Signature on File]

Warren Havens

⁴ The mailed copy being placed into a USPS drop-box today may not be processed by the USPS until the next business day.